=> s astemizole/cn 1 ASTEMIZOLE/CN L1=> d ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN L168844-77-9 REGISTRY RN ED Entered STN: 16 Nov 1984 1H-Benzimidazol-2-amine, 1-[(4-fluorophenyl)methyl]-N-[1-[2-(4-CN methoxyphenyl)ethyl]-4-piperidinyl]- (9CI) (CA INDEX NAME) OTHER NAMES: CN Astemisan CN Astemizole CN Hismanal CNHistamen Histaminos CN Histazol CNKelp CNCNLaridal Metodik CN Novo-Nastizol A CN NSC 329963 CN CN Paralergin R 42512 CN CNR 43512 CNRetolen CN Waruzol C28 H31 F N4 O MF CI COM STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, LC CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, HSDB*, IMSDRUGNEWS, IMSPATENTS, IMSRESEARCH, IPA, MEDLINE, MRCK*, MSDS-OHS, PHAR, PROMT, PROUSDDR, PS, RTECS*, SCISEARCH, SPECINFO, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU (*File contains numerically searchable property data) EINECS**, WHO Other Sources: (**Enter CHEMLIST File for up-to-date regulatory information)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

619 REFERENCES IN FILE CA (1907 TO DATE)
17 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
622 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s chlorpheniramine/cn L2 1 CHLORPHENIRAMINE/CN

```
ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
L2
     132-22-9 REGISTRY
RN
ED
     Entered STN: 16 Nov 1984
     2-Pyridinepropanamine, γ-(4-chlorophenyl)-N,N-dimethyl- (9CI)
                                                                      (CA
CN
     INDEX NAME)
OTHER CA INDEX NAMES:
     Pyridine, 2-[p-chloro-\alpha-[2-(dimethylamino)ethyl]benzyl]- (8CI)
OTHER NAMES:
CN
     (±)-Chloropheniramine
CN
     (±)-Chlorpheniramine
     \gamma-(4-Chlorophenyl)-\gamma-(2-pyridyl)propyldimethylamine
CN
     1-(p-Chlorophenyl)-1-(2-pyridyl)-3-dimethylaminopropane
CN
     2-[p-Chloro-\alpha-[2-(dimethylamino)ethyl]benzyl]pyridine
CN
CN
     3-(p-Chlorophenyl)-3-(2-pyridyl)-N, N-dimethylpropylamine
CN
     4-Chloropheniramine
CN
     Allergican
CN
     Chlorophenamine
CN
     Chloropheniramine
     Chlorophenylpyridamine
CN
CN
     Chloroprophenpyridamine
CN
     Chlorphenamine
     Chlorpheniramine
CN
     Chlorprophenpyridamine
CN
     dl-1-(p-Chlorophenyl)-1-(2-pyridyl)-3-(dimethylamino)propane
CN
CN
     Haynon
CN
     RS-Chlorpheniramine
FS
     3D CONCORD
     42882-96-2, 46970-45-0
DR
     C16 H19 Cl N2
MF
     COM
CI
LC
     STN Files:
                  ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO,
       CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN,
       CSCHEM, DDFU, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA,
       MEDLINE, MRCK*, PHAR, PROMT, PS, RTECS*, SPECINFO, TOXCENTER, USAN,
       USPAT2, USPATFULL, VETU
         (*File contains numerically searchable property data)
     Other Sources:
                      EINECS**, NDSL**, TSCA**, WHO
         (**Enter CHEMLIST File for up-to-date regulatory information)
        CH2-CH2-NMe2
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
             810 REFERENCES IN FILE CA (1907 TO DATE)
              26 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             813 REFERENCES IN FILE CAPLUS (1907 TO DATE)
               7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
=> s levocabastine/cn
L3
             1 LEVOCABASTINE/CN
=> d
L3
     ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
```

79516-68-0 REGISTRY

RN

```
Entered STN: 16 Nov 1984
ED
     4-Piperidinecarboxylic acid, 1-[cis-4-cyano-4-(4-fluorophenyl)cyclohexyl]-
     3-methyl-4-phenyl-, (3S,4R)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     4-Piperidinecarboxylic acid, 1-[4-cyano-4-(4-fluorophenyl)cyclohexyl]-3-
     methyl-4-phenyl-, [3S-[1(cis),3\alpha,4\beta]]-
OTHER NAMES:
     Levocabastine
CN
CN
     Levophta
     R 50547
CN
     STEREOSEARCH
FS
MF
     C26 H29 F N2 O2
CI
                  ADISINSIGHT, ADISNEWS, ANABSTR, BEILSTEIN*, BIOSIS,
LC
     STN Files:
       BIOTECHNO, CA, CAPLUS, CBNB, CHEMCATS, CIN, CSCHEM, DDFU, DRUGU, EMBASE,
       IMSDRUGNEWS, IMSPATENTS, IMSRESEARCH, IPA, MEDLINE, MRCK*, PHAR, PROMT,
       PROUSDDR, PS, SCISEARCH, SYNTHLINE, TOXCENTER, USAN, USPATZ, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:
```

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

196 REFERENCES IN FILE CA (1907 TO DATE)
5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
196 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> s triprolidine/cn
L4
             1 TRIPROLIDINE/CN
=> d
     ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
L4
RN
     486-12-4 REGISTRY
ED
     Entered STN: 16 Nov 1984
     Pyridine, 2-[(1E)-1-(4-methylphenyl)-3-(1-pyrrolidinyl)-1-propenyl]- (9CI)
CN
     (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Pyridine, 2-[1-(4-methylphenyl)-3-(1-pyrrolidinyl)-1-propenyl]-, (E)-
CN
     Pyridine, 2-[3-(1-pyrrolidinyl)-1-p-tolylpropenyl]-, (E)- (8CI)
CN
OTHER NAMES:
     trans-1-(2-Pyridyl)-3-pyrrolidino-1-p-tolylprop-1-ene
CN
     trans-1-(4-Methylphenyl)-1-(2-pyridyl)-3-pyrrolidinoprop-1-ene
CN
     trans-2-[3-(1-Pyrrolidinyl)-1-p-tolypropenyl]pyridine
CN
     Triprolidin
CN
     Triprolidine
```

```
Tripyrolidine
CN
     STEREOSEARCH
FS
MF
     C19 H22 N2
CI
     COM
     STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO,
LC
       CA, CAOLD, CAPLUS, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE,
       HSDB*, IFICDB, IFIUDB, IPA, MEDLINE, MRCK*, PROMT, PS, RTECS*, SPECINFO,
       TOXCENTER, USAN, USPATZ, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources: EINECS**, WHO
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

Double bond geometry as shown.

CN

CN

CN

Claritine

Clarityne

Clarityn

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

429 REFERENCES IN FILE CA (1907 TO DATE)

10 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

430 REFERENCES IN FILE CAPLUS (1907 TO DATE)

3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```
=> s loratidine/cn
             1 LORATIDINE/CN
=> d
     ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
     79794-75-5 REGISTRY
RN
     Entered STN: 16 Nov 1984
ED
     1-Piperidinecarboxylic acid, 4-(8-chloro-5,6-dihydro-11H-
CN
     benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-, ethyl ester (9CI) (CA
     INDEX NAME)
OTHER CA INDEX NAMES:
     11H-Benzo[5,6]cyclohepta[1,2-b]pyridine, 1-piperidinecarboxylic acid
CN
     deriv.
OTHER NAMES:
     Alavert
CN
CN
     Anhissen
CN
     Bonalerg
CN
     Civeran
CN
     Claratyne
CN
     Claritin
```

```
CN
     Cronopen
     Flonidan
CN
CN
     Fristamin
     Histaloran
CN
CN
     Klaritin
CN
     Lertamine
CN
     Lisino
CN
     Loracert
     Loradex
CN
CN
     Loranox
CN
    Lorastine
CN
     Loratadine
CN
     Loratidine
CN
     Loratyne
CN
     Lorfast
     Lowadina
CN
     Optimin
CN
CN
     Polaratyne
CN
     Pylor
CN
     Restamine
CN
     Sch 29851
     Sensibit
CN
CN
     Sohotin
     Tadine
CN
CN
     Velodan
CN
     Zeos
     C22 H23 Cl N2 O2
MF
CI
     COM
LC
     STN Files:
```

LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CIN, CSCHEM, DDFU, DRUGU, EMBASE, HSDB*, IMSCOSEARCH, IMSDRUGNEWS, IMSPATENTS, IMSRESEARCH, IPA, MEDLINE, MRCK*, PHAR, PIRA, PROMT, PROUSDDR, PS, RTECS*, SCISEARCH, SPECINFO, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU (*File contains numerically searchable property data)

Other Sources: WHO

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

911 REFERENCES IN FILE CA (1907 TO DATE)
21 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
915 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s cetirizine/cn

L6 1 CETIRIZINE/CN

=> d

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN

RN 83881-51-0 REGISTRY

ED Entered STN: 16 Nov 1984

CN Acetic acid, [2-[4-[(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN (±)-Cetirizine

CN Cetirizine

FS 3D CONCORD

DR 130018-86-9

MF C21 H25 Cl N2 O3

CI COM

LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CIN, CSCHEM, DDFU, DRUGU, EMBASE, IMSCOSEARCH, IMSDRUGNEWS, IMSPATENTS, IMSRESEARCH, IPA, MEDLINE, MRCK*, PHAR, PROMT, PROUSDDR, PS, RTECS*, SCISEARCH, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU

(*File contains numerically searchable property data)
Other Sources: WHO

$$\begin{array}{c|c} \text{C1} & \text{Ph} & \text{CH}_2\text{--}\text{CH}_2\text{--}\text{O}\text{--}\text{CH}_2\text{--}\text{CO}_2\text{H} \\ \hline \\ \text{CH} & \text{N} & \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

765 REFERENCES IN FILE CA (1907 TO DATE)

17 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

769 REFERENCES IN FILE CAPLUS (1907 TO DATE)

- AN 2002:190182 CAPLUS
- TI Design and synthesis of novel dual histamine H1/H3 receptor antagonists based on the H1 receptor antagonist chlorpheniramine
- AU Aslanian, Robert; Mutahi, Mwangi W.; Tom, Wing; Shih, Neng-Yang; Piwinski, John J.; West, Robert; Williams, Shirley M.; She, Susan
- CS Department of Chemical Research, Schering Plough Research Institute, Kenilworth, NJ, 07033, USA
- SO Abstracts of Papers, 223rd ACS National Meeting, Orlando, FL, United States, April 7-11, 2002 (2002), MEDI-063 Publisher: American Chemical Society, Washington, D. C. CODEN: 69CKOP
- DT Conference; Meeting Abstract
- LA English
- TI Design and synthesis of novel dual histamine H1/H3 receptor antagonists based on the H1 receptor antagonist chlorpheniramine
- AB Allergic rhinitis is a disease characterized by sneezing, rhinorrhia, pruritus, and nasal congestion. H1 antihistamines are effective at treating the first three symptoms, but are ineffective at treating nasal congestion. To improve their therapeutic profile, H1 antihistamines have been combined with α -agonist decongestants such as pseudoephedrine or phenylpropanolamine. However, α -agonists are contraindicated in individuals with cardiovascular or prostatic disease. Therefore, new methods for treating nasal congestion are desirable. Recent work has demonstrated that concurrent administration of a selective H1 antagonist with a selective H3 antagonist is decongesting in a histamine-driven cat model of nasal congestion. In light of this data, we set out to determine if a single chemical entity could be designed that would inhibit both the H1 and H3 receptors simultaneously. This paper will describe the discovery of novel dual antagonists of the histamine H1 and H3 receptors based on the selective H1 antagonist chlorpheniramine.

PMID: 10582118 Combined histamine H1 and H3 receptor blockade produces nasal decongestion in an experimental model of nasal congestion. McLeod R L; Mingo G G; Herczku C; DeGennaro-Culver F; Kreutner W; Egan R Allergy Department, Schering-Plough Research Institute, Kenilworth, NJ 07033-0539, USA. American journal of rhinology (UNITED STATES) Sep-Oct 1999, 13 (5) p391-9, ISSN 1050-6586--Print Journal Code: 8807268 Publishing Model Print Document type: Journal Article Languages: ENGLISH Main Citation Owner: NLM Record type: MEDLINE; Completed INDEX MEDICUS; Toxbib We studied the pharmacological actions of combined histamine H1/H3 receptor blockade on the increase in nasal airway resistance (NAR) and decrease in nasal cavity volume produced by nasal exposure to compound 48/80, a mast cell degranulator. In the anesthetized cat compound 48/80 (1%) produced a maximum increase in NAR of 9.1 +/- 0.7 cmH20.L/minute. The increase in NAR in animals pretreated with a ***combination*** of the H1 antagonist, chlorpheniramine (CTM; 0.8 mg/kg i.v.) and increasing doses of the H3 antagonist, thioperamide (THIO; 1.0, 3.0, and 10.0 mg/kg i.v.) were 6.1 +/- 2.1, 4.2 +/- 1.0 and 2.2 +/- 0.7 cmH20.L/minute, respectively. A second H3 antagonist, clobenpropit (CLOB; 0.03, 0.3, and 1.0 mg/kg i.v.) ***combined*** with CTM (0.8 mg/kg i.v.) also inhibited the nasal effects of compound 48/80. When the nonsedating H1 antihistamine, loratadine (3.0 mg/kg i.v.), was substituted for CTM, it also reduced nasal congestion when given in combination with THIO (10 mg/kg i.v.). In contrast, treatment with CTM (1.0 mg/kg i.v.) and the H2 antagonist, ranitidine (RAN; 1.0 mg/kg i.v.) were without activity. Loratadine, CTM, CLOB, RAN, or THIO administered alone were inactive. The alpha-adrenergic agonist, phenylpropanolamine (PPA; 1.0 mg/kg i.v.) demonstrated decongestant effects, but in contrast to H1/H3 blockade, PPA produced a significant hypertensive effect. Using acoustic rhinometry (AcR) we found that ***combined*** i.v. CTM (1.0 mg/kg) and THIO (10 mg/kg) and combined oral CTM (10 mg/kg) and THIO (30 mg/kg) blocked the decrease in nasal cavity volume produced by intranasal compound 48/80 (1%, 50 microL). We conclude that ***combined*** ***H1*** / ***H3*** histamine receptor blockade enhances the efficacy of an H1 antagonist by conferring decongestant activity to the H1 antihistamine. We propose that the decongestant activity of combined H1/H3 blockade may provide a novel approach for the treatment of allergic nasal congestion without the hypertensive liability of current therapies. Tags: Male Descriptors: *Chlorpheniramine--therapeutic use--TU; *Disease Models, *Histamine Antagonists--therapeutic use--TU; *Histamine H1 Antagonists -- therapeutic use -- TU; *Nasal Decongestants -- therapeutic use -- TU *Nasal Obstruction--drug therapy--DT; *Piperidines--therapeutic use--TU; Resistance--drug effects--DE; Animals; Cats; Drug Evaluation, Preclinical; Drug Therapy, Combination; Histamine Release --drug effects--DE; Nasal Cavity--drug effects--DE; Nasal Cavity--pathology--PA; Obstruction -- chemically induced--CI; Nasal Obstruction --physiopathology--PP; Nose--drug effects--DE; Nose--physiopathology--PP; p-Methoxy-N-methylphenethylamine Registry Number: 0 (Histamine Antagonists); 0 (Histamine H1 Antagonists); 0 (Nasal Decongestants); 0 (Piperidines); 106243-16-7 (thioperamide); 132-22-9 (Chlorpheniramine); 4091-50-3 (p-Methoxy-N-met hylphenethylamine) Record Date Created: 19991223

Record Date Completed: 19991223

13830654 PMID: 12113214

Histamine in health and disease.

Repka-Ramirez M Susana; Baraniuk James N

Georgetown University, Washington, DC, USA.

Clinical allergy and immunology (United States) 2002, 17 p1-25,

ISSN 1075-7910--Print Journal Code: 9431211

Contract/Grant No.: AI42403; AI; NIAID

Publishing Model Print

Document type: Journal Article; Review

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

INDEX MEDICUS

a potent vasoactive agent, bronchial smooth muscle Histamine is constrictor, and stimulant of nociceptive itch nerves. Activation of H1-receptors plays a central role in the immediate allergic reaction, but has less of an impact in chronic allergic disorders where inflammatory infiltrates, additional mediators such as LTC4/D4/E4 and cytokines, and structural remodeling occur. Histamine, through its H1-receptor-mediated activities, appears to be primarily a proinflammatory agent, yet it does have some homeostatic functions in gastric acid production (H2-receptors) and the central nervous system (predominantly H3-receptors) (97, 98). The realization that first-generation mixed pharmacological antihistamines often had properties (e.g., anticholinergic actions) and crossed the blood-brain barrier led to the development of the second-generation drugs, which are more selective for H1-receptors, have less access to the central nervous system, and, therefore, a more favorable benefit-to-risk ratio (therapeutic index). The potential for combined H1-H3-antagonists remains to be but offers another exciting opportunity for this explored,

ever-expanding family of beneficial drugs. (98 Refs.)

Descriptors: *Histamine--physiology--PH; Animals; Asthma--etiology Common Cold--etiology--ET; Endothelium, Vascular--cytology--CY; Histamine Release; Humans; Hypersensitivity--etiology--ET; Immunoglobulin E --immunology--IM; Research Support, U.S. Gov't, Non-P.H.S.; Research Support, U.S. Gov't, P.H.S.; Rhinitis, ***Allergic*** , Seasonal--etiology --ET; Urticaria--etiology--ET

CAS Registry No.: 37341-29-0 (Immunoglobulin E); 51-45-6 (Histamine)

Record Date Created: 20020712 Record Date Completed: 20020731